

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 7425-23/PAR	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/CA 97/ 00051	International filing date (day/month/year) 27/01/1997	(Earliest) Priority Date (day/month/year) 26/01/1996
Applicant  HSC RESEARCH AND DEVELOPMENT LIMITED ..... et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☒ Certain claims were found unsearchable (see Box I).
2. ☐ Unity of invention is lacking (see Box II).
3. ☒ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
  - ☒ filed with the international application.
  - ☐ furnished by the applicant separately from the international application,
    - ☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.
  - ☐ Transcribed by this Authority
4. With regard to the title, ☒ the text is approved as submitted by the applicant.
  - ☐ the text has been established by this Authority to read as follows:
5. With regard to the abstract,
  - ☒ the text is approved as submitted by the applicant.
  - ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.
6. The figure of the drawings to be published with the abstract is:
  - Figure No. - ☐ as suggested by the applicant. ☐ None of the figures.
  - ☐ because the applicant failed to suggest a figure.
  - ☐ because this figure better characterizes the invention.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/CA 97/00051

**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 82, 83  
because they relate to subject matter not required to be searched by this Authority, namely:  
Remark: Although these claims are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.☐ No protest accompanied the payment of additional search fees.

International Application No

PCT/CA 97/00051

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/12 C12N15/74 C12N5/10 C07K14/47 C07K16/18  
A01K67/027 C12Q1/68 G01N33/577 A61K31/70 A61K38/17  
A61K39/395 A61K48/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C07K A01K C12N G01N C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 270, no. 35, 1 September 1995, pages 20615-20620, XP002029380 JOHANSSON, E., ET AL. ON: "MOLECULAR CLONING AND EXPRESSION OF A PITUITARY GLAND PROTEIN MODULATING INTESTINAL FLUID SECRETION" cited in the application see the whole document --- -/-	1-12, 18-20, 30,31, 34, 41-47,49

☒ Further documents are listed in the continuation of box C.☐ Patent family members are listed in annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance  
"E" earlier document but published on or after the international filing date  
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
"O" document referring to an oral disclosure, use, exhibition or other means  
"P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
"&" document member of the same patent family

Date of the actual completion of the international search

14 April 1997

Date of mailing of the international search report

25. 04. 97

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PCT/CA 97/00051

## C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EMBL SEQUENCE DATA LIBRARY, 20 December 1994, HEIDELBERG, GERMANY, XP002029381 PAWLAK, A., ET AL. : "CHARACTERIZATION OF A LARGE POPULATION OF mRNAs FROM HUMAN TESTIS" cited in the application ACCESSION No. T18858 see the whole document ---	1-12, 18-20, 30,31,34
X	EMBL SEQUENCE DATA LIBRARY , 17 February 1995, HEIDELBERG, GERMANY, XP002029382 AUFRAY, C. , ET AL. : "IMAGE: INTEGRATED MOLECULAR ANALYSIS OF THE HUMAN GENOME AND ITS EXPRESSION" cited in the application ACCESSION No. F08730 see the whole document ---	1-12, 18-20, 30,31, 34, 41-47,49
X	EMBL SEQUENCE DATA LIBRARY, 22 July 1994, HEIDELBERG, GERMANY, XP002029383 ZAHRAOUI, A., ET AL. : "CODING SEQUENCES OF HUMAN Rab8 AND Rab11 cDNAs" cited in the application ACCESSION No. X56740 see the whole document ---	1-12, 18-20, 30,31, 34, 41-47,49
X	EMBL SEQUENCE DATA LIBRARY , 19 February 1991, HEIDELBERG, GERMANY, XP002029384 DRIVAS, G.T., ET AL.: "IDENTIFICATION AND CHARACTERIZATION OF A HUMAN HOMOLOG OF THE SCHIZOSACCHAROMYCES POMBE RAS-LIKE GENE YPT-3" cited in the application ACCESSION No. X53143 see the whole document ---	1-12, 18-20, 30,31, 34, 41-47,49
X	EMBL SEQUENCE DATA LIBRARY, 7 February 1992, HEIDELBERG, GERMANY, XP002029385 CHAMBON, P., ET AL. : "PURIFICATION , CLONING , AND RXR IDENTITY OF THE HELA CELL FACTOR WITH WHICH RAR OR TR HETERODIMERIZES TO BIND TARGET SEQUENCES EFFICIENTLY" cited in the application ACCESSION No. M84820 see the whole document ---	1-12, 18-20, 30,31, 34, 41-47,49

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EMBL SEQUENCE DATA LIBRARY, 31 March 1992, HEIDELBERG, GERMANY, XP002029386 FLEISCHHAUER, K., ET AL . : "ISOLATION OF A FULL-LENGTH cDNA CLONE ENCODING A N-TERMINALLY VARIANT FORM OF THE HUMAN RETINOID X RECEPTOR BETA" cited in the application ACCESSION No. X63522 see the whole document ---	1-12, 18-20, 30,31, 34, 41-47,49
X	EMBL SEQUENCE DATA LIBRARY, 10 December 1991, HEIDELBERG, GERMANY, XP002029387 YU, V.C., ET AL . : "RXR-beta: A COREGULATOR THAT ENHANCES BINDING OF RETINOIC ACID, THYROID HORMONE, AND VITAMIN D RECEPTORS TO THEIR COGNATE RESPONSE ELEMENTS" cited in the application ACCESSION No. M81766 see the whole document ---	1-12, 18-20, 30,31, 34, 41-47,49
X	EMBL SEQUENCE DATA LIBRARY, 7 January 1995, HEIDELBERG, GERMANY, XP002029388 SEVIGNY, G., ET AL.: "ASSIGNMENT OF THE HUMAN HOMOLOGUE OF THE mTRIC-P5 GENE (TRIC5) TO BAND 1q23 BY FLUORESCENCE IN SITU HYBRIDIZATION" cited in the application ACCESSION No. U17104 see the whole document ---	1-12, 18-20, 30,31, 34, 41-47,49
X	EMBL SEQUENCE DATA LIBRARY, 1 January 1994, HEIDELBERG, GERMANY, XP002029389 WALKLEY, N.A., ET AL . : "CLONING , STRUCTURE AND mRNA EXPRESSION OF HUMAN Cctg, WHICH ENCODES THE CHAPERONIN SUBUNIT CCTgamma" cited in the application ACCESSION No. X74801 see the whole document ---	1-12, 18-20, 30,31, 34, 41-47,49
X	EMBL SEQUENCE DATA LIBRARY, 22 April 1995, HEIDELBERG, GERMANY, XP002029390 HILLIER, L., ET AL . : "THE WashU-MERCK EST PROJECT" cited in the application ACCESSION No. R12984 see the whole document ---	1-12, 18-20, 30,31, 34, 41-47,49

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EMBL SEQUENCE DATA LIBRARY, 25 August 1995, HEIDELBERG, GERMANY, XP002029391 FUJIWARA, T., ET AL .: ""UNPUBLISHED"" cited in the application ACCESSION No. D55326 see the whole document ---	1-12, 18-20, 30,31,34
X	EMBL SEQUENCE DATA LIBRARY, 6 March 1995, HEIDELBERG, GERMANY, XP002029392 HILLIER, L., ET AL .: "THE WashU-MERCK EST PROJECT" cited in the application ACCESSION No. T64843 see the whole document -----	1-12, 18-20, 30,31, 34, 41-47,49